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Customer Interface Preferences to Ecotourism Destination Website

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Abstract. This study purpose was to investigate the customer interface combination preferences of tourist toward ecotourism destination website of Mt. Gede Pangrango National Park. Primary data resources obtained through the spread a questionnaire to youth tourists who several times visit this tourism destination and often observe its website. Data analysis techniques used is conjoint analysis. The results of this study show the customer interface attributes combination of preference base on 7 C framework are 1) Context of navigation, primary color, speed and layout. 2) Content attributes i.e. information, services, font, and picture. 3) Communication attribute are news letter, broadcast event, and contact placing. 4) Customization attribute of login and configuration. 5) Community group form. 6) Connection link to private management, government, NGO, private institution, community, related infrastructures. 7) Commerce attributes of registration consists of required preferences of user name, email address, and password combination.

Introduction

Ecotourism is one of the most successful and a dynamic industry in the world and it is constantly evolving because of technological advancements. Information technology is being used to enhance tourism services such as travel bookings, itinerary planning, destination marketing, and information sharing [1]. Concerning the information and communication technology tools in tourism destination hence the internet has been a most commonly used. So therefore, the internet has developed as the most effective tool for tourists to seek for information and choose the tourism product [2]. This potential condition very possible for Indonesia, of the use case of the internet in Indonesia known data from Markplus Insight that the number of internet users in Indonesia at the end of 2012 reached 61.08 million people, this figure rose about 10 % rather than 2011.

The internet can enable destinations to enhance their competitiveness. Provision of information on local facilities and attractions and the ability to reserve the whole range of tourism products determines the ability to attract the new and sophisticated types of tourism demand [3]. Due to the increasing number of ecotourism destination, hence, any ecotourism destination must be able to compete to attract customers by using the internet. A good customer interface display of websites as well as attractive and complete information is one of the company's strategies to attract visitors. There was a need to establish a model that can be used to explore the perceptions of tourist regarding tourism destination websites, Rayport and Jaworski's 7C's model the seven design elements of a customer interface was chosen as a reference framework [4]. The 7C's framework can provide valuable information on the tourism destination website's context, content, community, customization, communication, connection and commerce factors. The display of customer interface that compliance with the wishes of customer can be analyzed using conjoint analysis to know the right combination attributes of tourism destination website which attractive to visited by tourists. Using conjoint analysis on research is expected could describe tourism destination website attributes favored by tourists. This conjoint analysis study address to one of very famous ecotourism destination website in Indonesia, i.e. a Mountain Gede Pangrango National Park (TNGGP), those areas is one of five a national park that first announced in Indonesia in 1980 having broad area of 21.975 Ha. This area is important considering as main water supplier and reserve for Jakarta city, besides the area around TNGGP is habitats and regional cruising several kinds of flora and fauna

rare which need to be protected and preserved. The purpose of visitor to the TNGGP dominated by eco-tourist who pro environmental visitor. But the number of visitors TNGGP of 2006 until now is less stabile fluctuations. Therefore, immediate more intensive act of communication persuasion to promote TNGGP conservation activities. Hopefully, this research can generate recommendations for the formulation of design website of some tourist destination based on consumer preferences, in addition, the interview with leaders showed their demand for revising page destination websites. To complete and fulfill the expectations, hence the purposes of this research are: a) analyzing the number of stimulant card formed from each attribute, b) analyzing the combination of attributes of web sites that meet the preferences of tourists, c) analyze the significant differences between estimates preferences with actual preferences.

Literature Review

In marketing science, the concept of modeling consumer preferences among multi-attribute alternatives has received extensive attention. One of marketing consideration is consumer research has long been influenced by the assumptions of microeconomics and its notion of revealed preference. From this perspective, Cho et al [5] argue that consumers know what they like and want, and their preferences are revealed in the choices they make. In contrast, a large body of psychological research indicates that consumers' preferences are highly malleable and often constructed on the spot [6]. From this perspective, preferences are driven by the information that happens to be most accessible at the time of judgment choice. The marketer's aim is to characterize a product or information tools like in this research is website customer interface into a bundle of attributes and assign levels for each attribute. A technique known as conjoint analysis is used to obtain the numerical values of the product. Conjoint analysis is a popular marketing research technique that breaks down attributes to derive the part-worth associated with each level of a product based on the overall preferences of choice alternatives by a group of respondents [7].

Conjoint analysis in this research has been used for Rayport and Jaworski's framework of seven design elements for the tourism destination website customer interface (the 7C framework). The 7C framework was developed primarily for studying and analyzed website interfaces. The seven factors of Rayport and Jaworski's framework are: context, content, community, customization, communication, connection, and commerce. Based on preliminary qualitative research the 7Cs in the context of tourism destination website are formulated as follows: 1) the website's context factor refers to the way that the tourism destination website interface is developed with the use of aesthetic and functional look and feel, tourism destination sites context research focus on navigation, primary color, speed, and layout, 2) the website's content focuses on how a site design, content refers to what is presented, tourism destination sites content research focus on information, services, font text sizes, and pictures, 3) the website's community is interaction between site users, tourism destination sites community research focus on email providers, 4) the website's customization is website's ability to tailor itself to each user based on their preferences (personalization), tourism destination sites customization research focus on log-in and layout configuration, 5) the website's communication refers to dialogue between the interface and the users, tourism destination sites communication research focus on newsletters, event broadcast, and contact form, 6) the website's connection refers to the degree to which a website links to other sites, tourism destination sites communication research focus on links to several related institutions, 7) the website's commerce capabilities allow it to sell goods, products, and services, tourism destination sites commerce research focus on how the tourist commerce system form.

Methods

Data analysis techniques used in this research is conjoint analysis, which is based on the notion that a product or service can be decomposed into its component attributes [8]. A customer interface

web site is thereby described by levels of attributes associated with it. Conjoint analysis is a multivariate technique developed specifically to understand how respondents develop preferences for any type of object (products, services, or ideas). It is based on the simple premise that consumers evaluate the value of an object (real or hypothetical) by combining the separate amounts of value provided by each attribute [9]. Conjoint Analysis in principle aims to estimate the pattern of the opinion of the respondents, then compare with actual respondents preference [10].

Data Collection Techniques required in this study come from primary data and supported by secondary data, consists of literature and the questionnaire. Primary data resources obtained through the spread a questionnaire with sample amount 76 tourists who several times visit TNGGP tourism destination and often observe its website. The respondent was asked to do ranking assessment toward 7C framework factor stimuli of attributes combinations.

Results and Discussion

Analysis for context factor conducted in conjoint, first make stimulant or cards that will be used as a combination of statement at a questionnaire. For determining the amount of cards obtained from conjoint analysis calculation by the syntax processes. The card generates a context attribute consists of 8 cards from 32 combinations. Based on the results of the analysis of aggregate against context factor attributes website on table 1 bellow then obtained the following results: In general, respondents liked the look of a horizontal-shaped navigation; Fond of display looks white; faster; and is fond of statics layouts than fluid. The assessment importance values showed respondents assume primary color is the most important part in judging 51.5 % of context attributes tourism destination website. From significance test shows there is a significance relation between estimates preferences with actual preferences proven calculation Pearson's R 0,005 and Kendall's Tau 0,007. These values are reasonably high and significant at 95% level of confidence.

Table 1. Aggregate utility of context factor attributes importance level

No	Attributes	Attributes Level	Relative Importance	Utility
1.	Navigation	Vertical	16,4 %	-0,271
		horizontal		0,271
2.	Primary Color	Green	51,5%	0,215
		Red		-0,212
		Yellow		-0,278
		White		0,275
3.	Speed	Fast	16,8%	-0,173
		Faster		0,173
4.	Layout	Statics	15,5%	0,051
		Fluid		-0,051
Correlation			**Value**	**Significance**
Pearson's R			0.836	0.005
Kendall's Tau			0.714	0.007

Table 2. Aggregate utility of content factor attributes importance level

No.	Attributes	Attributes Level	Relative Importance	Utility
1.	Navigation	Vertical	16,4 %	-0,271
		horizontal		0,271
2.	Primary Color	Green	51,5%	0,215
		Red		-0,212
		Yellow		-0,278
		White		0,275
3.	Speed	Fast	16,8%	-0,173
		Faster		0,173
4.	Layout	Statics	15,5%	0,051
		Fluid		-0,051
Correlation			**Value**	**Significance**
Pearson's R			0.836	0.005
Kendall's Tau			0.714	0.007

The results of observation to content factor have showed syntax processes of conjoint analysis produce cards of content attributes with 9 cards from 81 combinations. Based on the results of the analysis of aggregate against content factor attributes website on table 2 above then obtained the following results: In general, respondents liked daily new information; Fond of email services; 12 font text; and is fond of really large pictures. The assessment importance values showed respondents assume font of text is the most important part in judging 28.6 % of content attributes tourism destination website. From significance test shows there is a significance relation between estimates preferences with actual preferences proven calculation Pearson's R 0.000 and Kendall's Tau 0.000. These values are reasonably high and significant at 99% level of confidence.

Syntax processes toward customization factor of conjoint analysis has produced the cards of customization attributes with 4 cards. Based on the results of the analysis of aggregate against customization factor attributes of website on table 3 bellow then obtained the following results: In

general, respondents liked email and password for log-in and is fond dashboard form of layout configuration. The assessment importance values showed respondents assume font of layout configuration is the most important part in judging 55.2 % of customization attributes tourism destination website. From significance test shows there is a significance relation between estimates preferences with actual preferences proven calculation Pearson's R 0.009 and Kendall's Tau 0.021. These values are reasonably high and significant at 95% level of confidence.

Table 3. Aggregate utility of customization factor attributes importance level

No	Attributes	Attributes Level	Relative Importance	Utility
1.	Log-in	E-mail & Password	44,7 %	0,092
		Name & Password		-0,092
2.	Layout Configuration	Edit Profile	55,2%	-0,408
		Dashboard		0,408
Correlation			**Value**	**Significance**
Pearson's R			0.983	0.009
Kendall's Tau			1.000	0.021

Table 4. Aggregate utility of communication factor attributes importance level

No	Attributes	Attributes Level	Relative Importance	Utility
1.	News Letters	Event Update	26,3 %	-0,219
		Article Update		0,219
2.	Broadcast Event	Web	51,6 %	-0,221
		e-mail		0,575
		Inbox		-0,353
3.	Contact	Right Header	21,9%	-0,153
		Footer		0,513
Correlation			**Value**	**Significance**
Pearson's R			0.727	0.021
Kendall's Tau			0.546	0.031

Syntax processes of conjoint analysis produce cards of communication factor attributes with 8 cards from 12 manual combinations. Based on the results of the analysis of aggregate against communication attributes website on table 4 above then obtained the following results: In general, respondents liked to read of the event update of newsletters; Fond of email broadcast event; and is fond of footer contact than right header. The assessment importance values showed respondents assume broadcast event is the most important part in judging 51.6 % of context attributes tourism destination website. From significance test shows there is a significance relation between estimates preferences with actual preferences proven calculation Pearson's R 0.021 and Kendall's Tau 0.031. These values are reasonably high and significant at 95% level of confidence.

On the website's community factor there are e-mail attributes which is composed of attributes such as Yahoo, the level of Gmail, and Hotmail. Research generates the level of an email attribute is Yahoo of 192, compared with the level of an attribute of Gmail amounting to 137 and to the level of an attribute email hotmail reached 127. Respondents preferred attributes emails using Yahoo in compare Gmail and Hotmail.

On the website's connection factor there are attributes that is composed of many institutions such as: private management, government, NGO, private institution, community, related infrastructures. Research produce numbers 292 namely NGO most favorite as institutions, i.e. Volcano Lovers in Indonesia, The Environmental Service Program (ESP), Borneo Orangutan Rescue Foundation, International Animal Rescue Indonesia, etc.

On the website's commerce factor there are attributes of registration consists of multiple statements such as: complete data, requires only a user name and password combination, requires only an e-mail address and password combination of tourists, and only require a name and email address of visitors who will be sent a password from the administrator of the website to the email address of the tourist. The research resulted in the numbers of tourists are very fond of 214 registration procedure is just using the name of the respondent and the combination of a password.

Conclusion

Conjoint analysis produce interface that every customer base on 7 c the framework attribute form several stimulant. Context attribute produce 8 cards from 32, Content attribute formed 9 cards from 91 combinations, Customization attribute formed 4 cards, and communication attribute formed 8 cards of 12 combinations. The card has become form combination is revealed in a questionnaire.

Preference tourists have formed combination tourism destination website, namely: a) on website's context, tourist prefer horizontal-shaped navigation, white primary color, faster speed, and statics layouts, b) on website's content, tourist prefer for use in email, text font size 12, and really large pictures, c) on website's communication, tourist prefer attribute of communication with news letter combination for use in new article update, the most effective event broadcast is email, and for contact location at footer, d) on website's customization, Tourist prefer customization attribute log-in uses e-mail, with a combination and choose dashboard as the layout of configuration, e) on website's community, tourist prefer using email, f) on website's connection attribute, tourist prefer take relation with NGO, g) on website's commerce attribute, Tourist prefer registration procedure only using the name of respondents and combinations of a password.

Research suggest to ecotourism destination management to analyze and identify tourist preferences periodically, because the results of this research is can be used as an input to improve and develop tourism destination websites. The proper Customer interface design will be able to increase the efficiency and effectiveness of communication of information, improvement of tourism destination tourist product intention, and marketing performance. Advice to finding furthers is possible to use the research for the attribute of other outside 7 C framework that could support the development of a website. The number of respondent could be developed to assess the other regional area.

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